SUBSTITUTE

ABSTRACT OF THE DISCLOSURE

The present invention discloses a method, apparatus, and article of manufacture for implementing a locking structure for supporting parity protection in a RAID clustered environment. When updating parity, the parity is locked so that other nodes cannot access or modify the parity. Accordingly, the parity is locked, read, generated, written, and unlocked by a node. An enhanced protocol may combine the lock and read functions and the write and unlock functions. Further, the SCSI RESERVE and RELEASE commands may be utilized to lock/unlock the parity data. By locking the parity in this manner, overhead is minimized and does not increase as the number of nodes increases.

ARC9-2000-0054-US1